

What is claimed is:

1. A method for manufacturing a discharge tube having a glass tube into which rare gas is put, a glass bead for sealing an end of said glass tube, and an electrode lead to be fixed to said glass bead, said method comprising the steps of:
  - applying heat by use of a heat application device to oxidize only a surface of a predetermined adhesion area of said electrode lead; and
- 10       fixing said glass bead to said adhesion area of said electrode lead.
2. A method as claimed in claim 1, wherein said heat application device comprising a pair of electrode members and a power source that applies a predetermined voltage between said pair of electrode members to heat said adhesion area.
- 15       3. A method as claimed in claim 2, wherein at least a portion of said electrode member to contact said electrode lead is made of a conductive material.
- 20       4. A method as claimed in claim 2, wherein a degree of oxidation of said adhesion area is adjusted by changing the voltage, the electric current, the energizing period of said power source, or a combination thereof.
- 25       5. A method as claimed in claim 1, wherein said heat application device is a laser device that irradiates laser light

to said adhesion area of said electrode lead.

6. A method as claimed in claim 1, wherein said heat application device is an infrared light device that irradiates  
5 infrared light to said adhesion area of said electrode lead.

7. A method as claimed in claim 1, wherein said heat application device is a heater device that applies heat to said adhesion area of said electrode lead without contacting said  
10 electrode lead.

8. A method as claimed in claim 7, wherein said heat application device is a ring-shaped ceramic heater with a hole to insert said electrode lead.

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9. A method as claimed in claim 1, wherein said heat application device is a high frequency induction heating device that is composed of a coil section that covers said adhesion area without contacting said electrode lead and a high frequency power source section that generates alternative current with high frequency to said coil section, thereby induction current is flown in said electrode lead to oxidize only the surface of  
20 said adhesion area.

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